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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Takashi Matsumoto

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08/23/2006

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EXAMINER

PATEL, JAY P

ART UNIT

PAPER NUMBER

2616

DATE MAILED: 08/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/746,616

Applicant(s)

MATSUMOTO ET AL.

Examiner

Jay P. Patel

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the remarks/arguments filed 5/16/2006.
2. Claims 1-6 and 14 are pending.
3. Claims 1-6 and 14 are rejected.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 14 recites the limitation "said network-gatekeeper device" on page 7 in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Curry et al. (US Paten 6542497 B1) in view of Inoue et al. (US Patent 6973068 B2).
8. In regards to claim 1, figure 2 in Curry discloses the details of a wireless gateway system 5 from figure 1. A PBX 65 is connected to a packet service gateway 69 connected through a BRI (basic rate interface) (connecting line switching exchanger (PBX) and a network gateway device by the use of a radio-base-station-connection line).

The packet service gateway 69 provides a means for connecting the wireless gateway system 5 to an IP network 31 (see figures 1 and 2) (connecting the network gateway device and an IP terminal through an IP network).

Access manager 67 in figure 2, controls registration (see column 5, lines 63-65) however, Curry fails to particularly teach registering the IP terminal in the database (access manager 67 or HLR 33)

Inoue teaches the above-mentioned limitation. Figure 2 is a message format of the registration message a mobile computer 2 (figure 1) sends to Home agent 5 (figure 1) (also see figure 2 and column 7, lines 44-46). The registration message reads on registering the IP terminal device.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the registration process of an mobile computer taught by Inoue with the PBX, gateway and HLR disclosed by Curry. The motivation to combine would be enable registration and allow roaming of a mobile terminal by the use of a switching architecture provided by a PBX.

In regards to claim 2, Curry teaches a line switching exchanger (PBX 65), a network gateway device (packet service gateway 69) and a database (access manger 67 in figure 2 and HLR 33 in figure 1).

Curry fails to teach transmitting location-registration information of an IP terminal device for registering information about a location of the IP terminal device and registering location information of the IP terminal device in the database.

Inoue teaches the above-mentioned limitations. Figure 2 is a message format of the registration message a mobile computer 2 (figure 1) sends to Home agent 5 (figure 1) (also see figure 2 and column 7, lines 44-46). The registration message reads on transmitting location-registration information about the IP terminal device and registering location of the IP terminal device.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the registration process of an mobile computer taught by Inoue with the PBX, gateway and HLR disclosed by Curry. The motivation to combine would be enable registration and allow roaming of a mobile terminal by the use of a switching architecture provided by a PBX.

9. In regards to claim 3, figure 2 in Curry discloses the details of a wireless gateway system 5 from figure 1. A PBX 65 is connected to a packet service gateway 69 connected through a BRI (basic rate interface) (connecting line switching exchanger (PBX) and a network gateway device by the use of a radio-base-station-connection line).

The packet service gateway 69 provides a means for connecting the wireless gateway system 5 to an IP network 31 (see figures 1 and 2) (connecting the network gateway device and an IP terminal through an IP network).

Access manager 67 in figure 2, controls registration (see column 5, lines 63-65) however, Curry fails to particularly teach registering the IP terminal in the database (access manager 67 or HLR 33)

Inoue teaches the above-mentioned limitation. Figure 2 is a message format of the registration message a mobile computer 2 (figure 1) sends to Home agent 5 (figure 1) (also see figure 2 and column 7, lines 44-46). The registration message reads on registering the IP terminal device.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the registration process of an mobile computer taught by Inoue with the PBX, gateway and HLR disclosed by Curry. The motivation to combine would be enable registration and allow roaming of a mobile terminal by the use of a switching architecture provided by a PBX.

In regards to clam 4, Curry in combination with Inoue teaches all the limitations of parent claim 3 as stated above. Inoue further teaches in figure 2, a message format of the registration message a mobile computer 2 (figure 1) sends to Home agent 5 (figure 1) (also see figure 2 and column 7, lines 44-46). The registration message reads on registering the IP terminal device.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the registration process of an mobile computer taught by Inoue with the PBX, gateway and HLR disclosed by Curry. The motivation to combine would be enable registration and allow roaming of a mobile terminal by the use of a switching architecture provided by a PBX.

In regards to claim 5, Curry in combination with Inoue teaches all the limitations of parent claim 3 as stated above. Inoue further teaches in figure 15 a user authentication database 114, which stores user information, extracted from a received

registration request message by the user information extraction unit 111 (see figure 15 and column 13, lines 63-67). The user authentication database 114 reads on storing authentication code of the IP terminal in the database. Figure 15 also discloses a challenge generation unit 112 for generating the challenge message according to the information stored in the user authentication database 114 (see column 13, line 57 and continued on to column 14, lines 1-2). The challenge generation unit 112 reads on executing authentication of the IP terminal device after receiving a location registration request by using the authentication code of the IP terminal.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to incorporate the components disclosed by Inoue in figure 15 with the PBX 65 disclosed by Curry. The motivation to combine would be provide a line-switching device (PBX 65) with the necessary modules to properly authenticate and register an IP terminal in its database.

In regards to claim 6, Figure 2 in Curry discloses a PBX 65.

In regards to claim 14, Curry in combination with Inoue teaches all the limitations of parent claim 1 as stated above. Inoue further discloses in figure 16 an external memory 32 connected to the mobile computer 2. The mobile computer 2 takes user information 321, the home agent information 322 and home address information 323 from the external memory 32 and generates a registration message in the format shown in figure 2 (see figure 16 and column 14, lines 57-64) and sends it to the home agent. Figure 3 also shows the details of the "extensions" field in figure 2. The SPI indicates a security parameter exchanged between the mobile computer and the home agent and

“authenticator” indicates the authentication code (see figure 3 and column 7, lines 59-65). The authenticator field along with the external memory 32 reads on storing an authentication code in the memory of the IP terminal and the message format in figure 2 reads on transmitting a location registration message of the IP terminal.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the registration process of an mobile computer and the authentication field in the registration message taught by Inoue with the PBX, gateway and HLR disclosed by Curry. The motivation to combine would be enable registration and allow roaming of a mobile terminal by the use of a switching architecture provided by a PBX.

Response to Arguments

10. Applicant's arguments with respect to claim1 filed on 5/16/2006 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jay P. Patel whose telephone number is (571) 272-3086. The examiner can normally be reached on M-F 9:00 am - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published

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applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

8/15/06 jpp
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